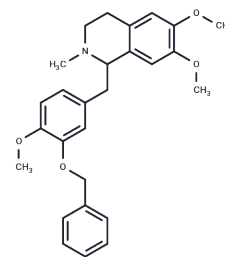


OY-101

## Chemical Properties

CAS No. : 41183-02-2  
 Formula: C<sub>27</sub>H<sub>31</sub>N<sub>2</sub>O<sub>4</sub>  
 Molecular Weight: 433.548  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
 Actual storage temperature shall be subject to the COA.



## Biological Description

Description	OY-101, an orally active compound, serves as a potent and specific inhibitor of P-glycoprotein (P-gp). It has the capability to sensitize drug-resistant tumors and counteract tumor multidrug resistance efficiently. Compared to Tetrandrine [1], OY-101 demonstrates enhanced water-solubility, cytotoxicity, and reversal activity.
Targets(IC50)	Others,P-gp
In vitro	OY-101 exhibits a remarkable synergistic anticancer effect with Vincristine in multidrug-resistant Eca109/VCR cells, with an IC <sub>50</sub> of 9.9 ± 1.3 nM[1]. OY-101 (0-5 μM) demonstrates negligible toxicity to Eca109/VCR cells and significantly enhances Vincristine sensitivity within these cells[1].
In vivo	OY-101, administered at a dose of 30 mg/kg every other day via oral gavage for a duration of three weeks, was observed to enhance the sensitization to vincristine in vivo without apparent toxicity [1]. Additionally, OY-101 demonstrated favorable pharmacokinetics with both intravenous administration (3 mg/kg) and oral administration (30 mg/kg) in single doses [1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3065 mL	11.5327 mL	23.0654 mL
5 mM	0.4613 mL	2.3065 mL	4.6131 mL
10 mM	0.2307 mL	1.1533 mL	2.3065 mL
50 mM	0.0461 mL	0.2307 mL	0.4613 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481